AMENDMENT AND RESPONSE

Serial Number: 09/748,754

Filing Date: December 26, 2000 SYSTEM AND METHOD FOR CARDIAC RHYTHM MANAGEMENT WITH SYNCHRONIZED PACING PROTECTION

Title:

initiating a synchronized chamber protection period of predetermined duration after a synchronized chamber sense during which a pace to the synchronized chamber scheduled by the

synchronized pacing mode is inhibited while the escape interval continues to run.

2. (Amended) The method of claim 1 further comprising pacing the rate chamber in accordance

with a bradycardia pacing mode based upon rate chamber senses and paces[;].

3. (Amended) The method of claim 1 wherein [right and left ventricles are the rate and

synchronized chamber, respectively, and the synchronized chamber protection period is a left

ventricular protection period] the rate and synchronized chambers are ventricles.

4. (Amended) The method of claim 1 wherein [the paired atria are] the rate and synchronized

chambers are atria.

5. (Amended) The method of claim 1 further comprising pacing one or more additional

synchronized pacing sites in accordance with [a] the synchronized pacing mode based upon rate

chamber events and wherein pacing of each synchronized site is inhibited during [a] the

synchronized chamber protection period that is initiated by a sense or pace at the synchronized

site.

10. (Amended) The method of claim 9 wherein a pace to the synchronized chamber may

be triggered by [a] the synchronized chamber sense and wherein the synchronized chamber

protection period starts only after a specified delay from [such a triggering event] the

synchronized chamber sense, which allows triggered pacing but prevents pacing during the

vulnerable period of the synchronized chamber.

11. (Amended) A cardiac rhythm management device, comprising:

sensing channels for sensing depolarizations from heart chambers designated as a rate

chamber and a synchronized chamber;

a first pacing channel for pacing the synchronized chamber;

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SYSTEM AND METHOD FOR CARDIAC RHYTHM MANAGEMENT WITH SYNCHRONIZED PACING PROTECTION

PERIOD

Title:

a controller for controlling the delivery of paces in accordance with a programmed pacing mode; and,

wherein the controller is programmed to pace the synchronized chamber <u>upon expiration</u> of an escape interval in accordance with a synchronized pacing mode based upon rate chamber events [and wherein pacing of the synchronized chamber is inhibited during a synchronized chamber protection period that is initiated by a synchronized chamber sense or pace] ; and,

wherein the controller is programmed to initiate a synchronized chamber protection period of predetermined duration after a synchronized chamber sense during which a pace to the synchronized chamber scheduled by the synchronized pacing mode is inhibited while the escape interval continues to run .

- 12. (Amended) The device of claim 11 further comprising a <u>second</u> pacing channel for [delivering paces to] <u>pacing</u> the rate chamber and wherein the controller is programmed to pace the rate chamber in accordance with a bradycardia pacing mode.
- 13. (Amended) The device of claim 11 wherein [right and left ventricles are the rate and synchronized chambers, respectively, and the synchronized chamber protection period is a left ventricular protection period] the rate and synchronized chambers are ventricles.
- 14. (Amended) The device of claim 11 wherein [the paired atria are] the rate and synchronized chambers are atria.
- 15. (Amended) The device of claim 11 further comprising channels for pacing one or more additional synchronized pacing sites in accordance with [a] the synchronized pacing mode based upon rate chamber events and wherein pacing of each synchronized site is inhibited during [a] the synchronized chamber protection period that is initiated by a sense or pace at the synchronized site.